

ABSTRACT OF THE DISCLOSURE

A method and mechanism for arbitrating and transmitting data. A first transaction and a second transaction are detected. The first transaction is targeted to a first domain and the second transaction is targeted to a second domain different than the first domain. Subsequent to receiving the transactions, arbitration domains corresponding to each are determined. In response to detecting the arbitration domains are not equal, the first and second transaction may be transmitted concurrently. However, if the arbitration domains are determined to be equal, arbitration is performed and transmission of the first and second transactions is serialized. Also contemplated is generating masks corresponding to each of the received transactions. The masks which are generated include an indication of the target domain of the corresponding transaction. When the transaction is conveyed to a port for transmittal, its mask is conveyed as well. Each port includes a domain vector register indicating the domains to which it is connected. By comparing the received mask to the domain vector register, a determination is made as to whether the transaction is to be output on the port or not.